

4.0 HORIZON YEAR (2030) WITH BARRIO LOGAN ADOPTED COMMUNITY PLAN

This section summarizes the results of the Horizon Year (2030) conditions analysis within the Barrio Logan community taking into account the land use changes proposed under the Adopted Community Plan. This section is included for planning comparison purpose only. Since this report does not analyze for traffic related impact for the Adopted Community Plan, a detailed peak-hour intersection analysis was not included in this chapter.

Roadway Network

No roadway network changes are assumed to take place under this scenario, with the exception of the addition of a High Occupancy Vehicle (HOV) lane along the I-5 Corridor for both directions of traffic. The additional HOV lane is listed in Sandag's 2030 Regional Transportation Plan (RTP).

Traffic Volumes

The Horizon Year Average Daily Traffic (ADT) volumes on the roadway segments in the study area were derived from a City of San Diego traffic forecast model that incorporated the land use changes proposed under the Adopted Community Plan. A copy of the forecast model is included in **Appendix G**.

Table 4-1 presents a more detailed trip generation summary for the community with the land uses included in the Adopted Community Plan. As shown in the table, the land use designation of the Adopted Community Plan would generate a total of approximately 180,666 average daily trips, including 12,390 (9,713 in and 2,677 out) morning peak-hour trips and 18,484 (6,614 in and 11,870 out) afternoon peak-hour trips.

Modeled forecast volumes experienced some minor refinements. In the process of calibrating the existing model, it was concluded that three post model adjustments should be made to the 2030 traffic models. Traffic volumes along Cesar Chavez Parkway between Newton Avenue and Main Street were reduced by 4,300 ADT to account for Newton Avenue not being in the model. Traffic volumes on 28th Street and 32nd between Main Street and Harbor Drive were increased by 4,000 ADT and 600 ADT, respectively, per calibration between base year model and actual traffic volume counts. Minor smoothing of traffic volumes were made to reflect the gross nature of model loadings from TAZs. Volumes for streets that were not in the traffic model were estimated applying a growth rate generally consistent with other facilities in the community. Resulting daily traffic volumes for the Adopted Community Plan are depicted in **Figure 4-1**.



Figure 4-1: Horizon Year (2030) ADT Volumes (Adopted Community Plan)

TABLE 4-1
TRIP GENERATION SUMMARY (ADOPTED COMMUNITY PLAN)

Land Use	Units ¹	Daily Trips	AM Peak-Hour			PM Peak-Hour		
			In	Out	Total	In	Out	Total
ACTIVE PARK	8.50 acre	372	0	15	15	0	30	30
ELEMENTARY SCHOOL (stu)	529.00 stu	1,539	286	191	477	117	175	292
FAST FOOD REST. (ksf)	19.50 ksf	13,675	328	219	547	547	548	1,095
FIRE OR POLICE STATION	1.00 site	229	31	3	34	3	31	34
HEAVY INDUSTRY (ksf)	3,490.30 ksf	14,140	1,400	155	1,555	339	1,358	1,697
INACTIVE USE	7.50 acre	0	0	0	0	0	0	0
JUNIOR COLLEGE (ksf)	70.00 ksf	1,295	140	15	155	31	73	104
LIGHT INDUSTRY (ksf)	3,009.40 ksf	48,157	4,767	531	5,298	1,156	4,623	5,779
LOW RISE OFFICE(3917)(ksf)	178.60 ksf	2,601	257	29	286	62	250	312
LOW RISE OFFICE(3921)(ksf)	132.30 ksf	2,464	244	27	271	59	237	296
LOW RISE OFFICE(3957)(ksf)	84.10 ksf	1,476	146	16	162	35	142	177
LOW RISE OFFICE(3988)(ksf)	31.30 ksf	698	69	8	77	17	67	84
LOW RISE OFFICE(FT3985)(ksf)	15.70 ksf	414	48	6	54	12	46	58
LOW RISE OFFICE(FT3988)(ksf)	120.90 ksf	1,937	227	25	252	54	217	271
MARINA (CCDC)	0.00 acre	0	0	0	0	0	0	0
MARINE TERMINAL	0.00 acre	0	0	0	0	0	0	0
MILITARY USE (Gate 9 - site)	0.00 site	7,581	68	159	227	318	213	531
MULTI-FAMILY (BL)	3,191.00 du	19,491	176	408	584	819	546	1,365
NEIGHBORHOOD SHOP CNT (ksf)	175.10 ksf	20,813	500	333	833	1,146	1,143	2,289
OTHER HEALTH CARE (ksf)	112.70 ksf	5,610	269	67	336	168	393	561
OTHER PUBLIC SERVICE	0.20 acre	58	5	0	5	2	5	7
OTHER TRANSPORTATION	5.10 acre	433	42	19	61	19	46	65
PARKING	0.50 acre	0	0	0	0	0	0	0
RAIL STATION (BL)	0.60 acre	181	18	7	25	8	19	27
REGIONAL COMM.(Mtro)(ksf)	0.00 ksf	5,817	81	35	116	262	262	524
SINGLE FAMILY (BL)	31.00 du	274	5	17	22	18	9	27
SPECIALTY COMM.(mtro)(ksf)	0.00 ksf	2,958	53	36	89	133	133	266
STREETFRONT COMMERCIAL (ksf)	698.60 ksf	27,994	505	335	840	1,260	1,260	2,520
WAREHOUSING (ksf)	90.60 ksf	459	48	21	69	29	44	73
WHOLESALE TRADE	0.00 acre	0	0	0	0	0	0	0
Total		180,666	9,713	2,677	12,390	6,614	11,870	18,484

Note:

1. du = Dwelling Unit; stu = Students; ksf = Thousand square feet

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Roadway Segment Analysis

Table 4-2 displays the roadway segment analysis under the Horizon Year (2030) conditions for the Adopted Community Plan. As shown in the table, based on planning level analysis and on ADT volumes, the Adopted Community Plan would be considered having a cumulative roadway segment impact along the following roadway segments:

- Cesar Chavez Parkway between Logan Avenue and National Avenue (LOS E);
- Cesar Chavez Parkway between National Avenue and Newton Avenue (LOS F);
- Cesar Chavez Parkway between Newton Avenue and Main Street (LOS F);
- Sampson Street between National Avenue and Harbor Drive (LOS F);
- 26th Street between National Avenue and Main Street (LOS F);
- 28th Street between I-5 and Boston Avenue (LOS F);
- 32nd Street between Main Street and Wabash Boulevard (LOS F);
- Vesta Street between Main Street and I-5 Ramps (LOS E);
- Logan Avenue between Sigsbee Street and Cesar Chavez Parkway (LOS F);
- National Avenue between 16th Street and Sigsbee Street (LOS E);
- National Avenue between Sigsbee Street and Beardsley Street (LOS E);
- National Avenue between Beardsley Street and Cesar Chavez Parkway (LOS F);
- National Avenue between Cesar Chavez Parkway and Evans Street (LOS F);
- National Avenue between Sicard Street and 27th Street (LOS F);
- Boston Avenue between 28th Street and 29th Street (LOS F);
- Boston Avenue between 29th Street and 32nd Street (LOS F);
- Main Street between Cesar Chavez Parkway and Evans Street (LOS F);
- Main Street between Evans Street and 26th Street (LOS F);
- Main Street between 26th Street and 28th Street (LOS F);
- Main Street between 28th Street and 29th Street (LOS F);
- Main Street between 29th Street and 32nd Street (LOS F);
- Main Street between 32nd Street and Rigel Street (LOS F);
- Main Street between Rigel Street and Una Street (LOS F); and
- Main Street between Una Street and I-5 SB Off-ramp (LOS F).

Freeway Segment Analysis

Table 4-3 displays the freeway segments analysis under the Horizon Year (2030) conditions for the Adopted Community Plan. As shown in the table, the Adopted Community Plan would have a cumulative traffic related impact along the following freeway segments:

- I-5 from J Street to SR-75 Junction (LOS F and LOS E for the morning and afternoon peak-hour periods, respectively);
- I-5 from SR-75 Junction to 28th Street (LOS F and LOS E for the morning and afternoon peak-hour periods, respectively);
- I-5 from 28th Street to I-15 Interchange (LOS E during the morning peak-hour periods);
- I-5 from I-15 Interchange to Division Street (LOS F both peak-hour periods); and
- I-15 from I-5 Interchange to Ocean View Boulevard (LOS E and LOS F for the morning and afternoon peak-hour periods, respectively)

TABLE 4-2
HORIZON YEAR (2030) CONDITIONS WITH ADOPTED COMMUNITY PLAN
ROADWAY SEGMENT LOS SUMMARY

ROADWAY SEGMENT	ROADWAY CLASSIFICATION(a)	HIGHEST ACCEPTABLE LOS	LOSE CAPACITY	EXISTING CONDITIONS			YEAR 2030 (ADOPTED COMMUNITY PLAN)			Δ_{in}	VIC SIGNIFICANT?
				ADT	V/C RATIO	LOS	ADT	V/C RATIO	LOS		
Cesar Chavez Pkwy											
north of Logan Ave	3 Lane Collector (with TWLT)	18,750	22,500	14,170	0.630	C	16,000	0.711	D	0.081	NO
between Logan Ave and National Ave	4 Lane Collector (with TWLT)	25,000	30,000	15,300	0.510	C	27,600	0.920	E	0.410	YES
between National Ave and Newton Ave	3 Lane Collector (with TWLT)	18,750	22,500	12,494	0.555	C	27,300	1.213	F	0.658	YES
between Newton Ave and Main St	3 Lane Collector (with TWLT)	18,750	22,500	11,812	0.525	C	23,300	1.036	F	0.511	YES
between Main St and Harbor Dr	4 Lane Collector (with TWLT)	25,000	30,000	10,381	0.346	B	12,500	0.417	B	0.071	NO
Sampson St											
between I-5 and National Ave	2 Lane Collector (No TWLT)	6,500	8,000	3,086	0.386	B	6,200	0.775	D	0.389	NO
between National Ave and Harbor Dr	2 Lane Collector (No TWLT)	6,500	8,000	2,561	0.320	B	9,200	1.150	F	0.830	YES
26th St											
between National Ave and Main St	2 Lane Collector (No TWLT)	6,500	8,000	2,380	0.298	A	8,700	1.088	F	0.790	YES
28th St											
between I-5 and Boston Ave	3 Lane Collector (with TWLT)	18,750	22,500	22,000	0.978	E	25,400	1.129	F	0.151	YES
between Boston Ave and Main St	4 Lane Collector (with TWLT)	25,000	30,000	18,856	0.629	C	21,200	0.707	D	0.078	NO
between Main St and Harbor Dr	4 Lane Major Arterial	35,000	40,000	16,658	0.416	B	19,600	0.490	B	0.074	NO
29th St											
between Boston Ave and Main St	2 Lane Collector (No TWLT)	6,500	8,000	1,500	0.188	A	5,800	0.725	D	0.538	NO
32nd St											
between Main St and Wabash Blvd	2 Lane Collector (with TWLT)	13,000	15,000	13,172	0.878	E	15,000	1,000	F	0.122	YES
between Wabash Blvd and Harbor Drive	4 Lane Major Arterial	35,000	40,000	19,785	0.495	B	27,200	0.680	C	0.185	NO
Rigel St											
between Main St and I-5	2 Lane Collector (No TWLT)	6,500	8,000	1,723	0.215	A	1,400	0.175	A	-0.040	NO
Vesta St											
between Main St and I-5	2 Lane Collector (No TWLT)	6,500	8,000	4,900	0.613	C	6,600	0.825	E	0.212	YES
Logan Ave											
between 17th St and Sigsbee St	2 Lane Collector (with TWLT)	13,000	15,000	3,659	0.244	A	11,400	0.760	D	0.516	NO
between Sigsbee St and Cesar Chavez Pkwy	2 Lane Collector (with TWLT)	13,000	15,000	7,478	0.499	C	17,800	1.187	F	0.688	YES
between Cesar Chavez Pkwy and 26th St	2 Lane Collector (with TWLT)	13,000	15,000	2,954	0.197	A	6,900	0.460	B	0.263	NO
National Ave											
between 16th St and Sigsbee St	2 Lane Collector (with TWLT)	13,000	15,000	2,603	0.174	A	14,400	0.960	E	0.786	YES
between Sigsbee St and Beardsley St	2 Lane Collector (with TWLT)	13,000	15,000	4,500	0.300	A	14,400	0.960	E	0.660	YES
between Beardsley St and Cesar Chavez Pkwy	2 Lane Collector (No TWLT)	6,500	8,000	3,511	0.439	C	18,000	2.250	F	1.811	YES
between Cesar Chavez Pkwy and Evans St	2 Lane Collector (No TWLT)	6,500	8,000	4,643	0.580	C	8,700	1.088	F	0.508	YES
between Evans St and Sicard St	2 Lane Collector (with TWLT)	13,000	15,000	3,677	0.245	A	8,700	0.580	C	0.335	NO
between Sicard St and 27th St	2 Lane Collector (No TWLT)	6,500	8,000	8,445	1.036	F	9,300	1.163	F	0.107	YES
Boston Ave											
between 28th and 29th St	2 Lane Collector (No TWLT)	6,500	8,000	2,420	0.303	A	17,100	2.138	F	1.835	YES
between 29th St and 32nd St	2 Lane Collector (No TWLT)	6,500	8,000	2,420	0.303	A	9,200	1.150	F	0.847	YES
Main St											
between Beardsley St and Cesar Chavez Pkwy	2 Lane Collector (No TWLT)	6,500	8,000	3,566	0.446	C	5,700	0.713	D	0.267	NO
between Cesar Chavez Pkwy and Evans St	2 Lane Collector (No TWLT)	6,500	8,000	2,598	0.325	B	10,300	1.288	F	0.963	YES
between Evans St and 26th St	2 Lane Collector (No TWLT)	6,500	8,000	2,598	0.325	C	17,100	2.138	F	1.813	YES
between 26th St and 28th St	3 Lane Collector (No TWLT)	9,750	11,250	7,435	0.661	C	14,300	1.271	F	0.610	YES
between 28th and 29th St	4 Lane Collector (No TWLT)	13,000	15,000	11,266	0.867	F	13,500	0.900	F	0.033	YES
between 29th St and 32nd St	3 Lane Collector (No TWLT)	9,750	11,250	11,266	1.407	F	19,400	1.724	F	0.317	YES
between 32nd St and Rigel St	4 Lane Collector (No TWLT)	13,000	15,000	21,100	1.407	F	26,300	1.753	F	0.346	YES
between Rigel St and Una St	2 Lane Collector (with TWLT)	13,000	15,000	15,944	1.063	F	20,100	1.340	F	0.277	YES
between Una St and I-5 SB Off Ramp	2 Lane Collector (with TWLT)	13,000	15,000	15,177	1.012	F	17,500	1.167	F	0.155	YES
Harbor Dr											
between Beardsley St and Cesar Chavez Pkwy	4 Lane Major Arterial	35,000	40,000	12,094	0.302	A	30,200	0.755	D	0.453	NO
between Cesar Chavez Pkwy and Sampson St	4 Lane Major Arterial	35,000	40,000	13,778	0.344	A	26,300	0.658	C	0.314	NO
between Sampson St and Schley St	4 Lane Major Arterial	35,000	40,000	9,080	0.227	A	25,300	0.633	C	0.406	NO
between Schley St and 28th St	4 Lane Major Arterial	35,000	40,000	8,816	0.220	A	20,700	0.518	B	0.298	NO
between 28th St and 32nd St	4 Lane Major Arterial	35,000	40,000	18,900	0.473	B	28,500	0.713	C	0.240	NO
between 32nd St and Vesta St	4 Lane Major Arterial	35,000	40,000	16,320	0.408	B	32,300	0.808	D	0.400	NO

Notes:

Bold values indicate roadway segments operating at LOS E or F.

(a) Roadway Functional Classifications are based on field observations.

(b) The v/c Ratio is calculated by dividing the ADT volume by each respective roadway segment's capacity.

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TABLE 4-3
HORIZON YEAR (2030) CONDITIONS WITH ADOPTED COMMUNITY PLAN
FREEWAY SEGMENT LOS SUMMARY

FREEWAY SEGMENT	DIRECTION	EXISTING				ADOPTED COMMUNITY PLAN							
		NUMBER OF LANES	CAPACITY (a)	ADT (b)	PEAK-HOUR VOLUME (c)	LOS	NUMBER OF LANES	CAPACITY (a)	ADT (b)	PEAK-HOUR VOLUME (c)	V/C RATIO	LOS	V/C RATIO
AM PEAK													
I-5													
J Street to SR-75 junction	NB	4 M	9,400	164,000	7,793	D	4 M + 1 H	11,000	244,500	11,618	1,056	F0	0.23
	SB	4 M	9,400				4 M + 1 H	11,000					YES
SR-75 Junction to 28th Street	NB	4 M	9,400	160,000	7,603	D	4 M + 1 H	11,000	242,100	11,504	1,046	F0	0.24
	SB	4 M	9,400				4 M + 1 H	11,000					YES
28th Street to I-15 Interchange	NB	4 M	9,400	154,000	7,317	C	4 M + 1 H	11,000	222,900	10,591	0,963	E	0.18
	SB	4 M	9,400				4 M + 1 H	11,000					YES
I-15 Interchange to Division St	NB	4 M	9,400	188,000	8,933	E	4 M + 1 H	11,000	262,100	12,454	1,132	F0	0.18
	SB	4 M	9,400				4 M + 1 H	11,000					YES
I-15													
I-5 Interchange to Ocean View Blvd	NB	3 M	7,050	95,000			3 M	7,050	130,800				
	SB	3 M	7,050		4,722	C	3 M	7,050		6,501	0,922	E	0.25
SK-75 (d)													
I-5 Interchange to Glorieta Blvd	WB	2 M	4,700	73,000			2 M	4,700	89,800				
	EB	3 M	7,050		4,629	C	3 M	7,050		5,694	0,808	D	0.15
I-5													
PM PEAK													
J Street to SR-75 junction	NB	4 M	9,400	164,000	7,036	C	4 M + 1 H	11,000	244,500	10,490	0,954	E	0.21
	SB	4 M	9,400				4 M + 1 H	11,000					YES
SR-75 Junction to 28th Street	NB	4 M	9,400	160,000	6,865	C	4 M + 1 H	11,000	242,100				--
	SB	4 M	9,400				4 M + 1 H	11,000					--
28th Street to I-15 Interchange	NB	4 M	9,400	154,000	6,607	C	4 M + 1 H	11,000	222,900	9,563	0,869	D	0.17
	SB	4 M	9,400				4 M + 1 H	11,000					--
I-15 Interchange to Division St	NB	4 M	9,400	188,000	8,066	D	4 M + 1 H	11,000	262,100	11,245	1,022	F0	0.16
	SB	4 M	9,400										--
I-15													
I-5 Interchange to Ocean View Blvd	NB	3 M	7,050	95,000	5,216	C	3 M	7,050	130,800	7,182	1,019	F0	0.28
	SB	3 M	7,050				3 M	7,050					YES
SK-75 (d)													
I-5 Interchange to Glorieta Blvd	WB	3 M	7,050		4,585	C	3 M	7,050	89,800	5,640	0,800	D	0.15
	EB	2 M	4,700				2 M	4,700					--

Notes:

Bold values indicate freeway segments operating at LOS E or F.

M=Main Lane; A=Auxiliary Lane; H=HOV Lane.

This analysis evaluates the lighter peak-hour direction of traffic.

(a) The capacity is calculated as 2,350 ADT per main lane and 1,200 ADT per auxiliary lane

(b) Traffic volumes provided by Caltrans

(c) Peak-hour volume calculated by: $(ADT)^{0.75} \times D \times \text{Truck Factor}$

(d) SR-75 has reversible lanes.